

REMARKS

The present application relates to hybrid maize plant and seed 38A24. Claims 9-11, 13-19, 22-24, 26-32, 34-40 have been canceled. Claims 43-58 have been added. No new matter has been added by the present amendment. Applicant respectfully requests consideration of the following remarks.

Detailed Action

A. Status of the Application

Applicant acknowledges the objection to the specification for the presence of a blank line on page 7 as withdrawn. Applicant also acknowledges the objection to claims 6, 12, 16, 25 and 29 as withdrawn. The rejection of claims 1-32 under 35 U.S.C. § 112, second paragraph, are acknowledged as withdrawn. Applicant further acknowledges the rejection of claims 1-32 under 35 U.S.C. § 112, first paragraph, requiring a deposit of the maize seed of the invention as withdrawn in light of the deposit and the deposit statement in the specification and the paper received November 13, 2002. Finally Applicant acknowledges the rejection of claims 1-32 under 35 U.S.C. § 102(e)/§103(a) as withdrawn.

Applicant further acknowledges that the Examiner states in the Advisory Action of June 30, 2003, that Applicant's reply has overcome the following rejection(s): the rejection of claims 11, 15, 19, 24, 28, 32, 34, 38-42, under 35 U.S.C. § 112, second paragraph; the rejection of claim 33 under 35 U.S.C. § 112, first paragraph.

B. Specification

Applicant acknowledges the amendment to page 46 of the specification, amending the deposit information to include information concerning the deposit of seed of the inbred parents of the hybrid 38A24 has been entered.

Rejections under 35 U.S.C. § 112, Second Paragraph

Claims 8 and 21 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 8, 21 and 41 stand rejected for the recitation "genetic factor" as rendering the claims indefinite.

Applicant has now amended claims 8, 21, and 41 to include the recitation --transgene--, as suggested by the Examiner, thus alleviating this rejection. Applicant thanks the Examiner for the suggested language.

In light of the above amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of the rejections under 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 9-19 and 22-32 remain and claims 34-40 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, for the reasons of record stated in the Office Action mailed August 13, 2002. The Examiner states that the deposit of seed of plant 38A24 does not provide a description of the plants that are encompassed by the rejected claims, which have not been deposited. The Examiner further states the specification does not provide a description of the alleles of 38A24, nor does it describe the functions that are associated with each of the alleles of 38A24. The Examiner suggests that claims 12 and 25 be amended by listing the types of transgenes that may be introduced. Finally, the Examiner states that the specification does not mention any double haploid method.

Applicant respectfully traverses this rejection. Applicant asserts that the introgression of mutant genes and transgenes is easily, routinely and extensively practiced by those of ordinary skill in the art. Backcrossing has been known since the 1920's and, because of its predictability, is the method preferred by commercial plant breeders to introduce transgenes into already developed and tested material. As stated in Poehlman *et al.* (1995) on page 334, submitted in the Information Disclosure Statement, "a backcross derived inbred line fits into the same hybrid combination as the recurrent parent inbred line and contributes the effect of the additional gene added through the backcross." Applicant further points out that cytoplasmic male sterility genes do not introduce linked nuclear genes. Wych (1988) on page 585-586, submitted in the Information Disclosure Statement, discusses how the male sterility trait is routinely backcrossed

into an inbred line and how this is used to produce a sterile/fertile blend of an F1 hybrid in order to reduce seed production costs. In fact, many commercial products are produced in this manner, and those of ordinary skill in the art consider the F1 hybrid produced with the male sterile inbred to be the same variety as the F1 hybrid produced with the fertile version of the inbred. Applicant also refers the Examiner to Openshaw *et al.* submitted herewith, which states the "the backcross breeding procedure is being used widely to transfer simply inherited traits into elite genotypes...Today, backcrossing is being used to transfer genes introduced by such techniques as transformation or mutation into appropriate germplasm."

Nonetheless, in an effort to expedite prosecution, Applicant has canceled claims 9-11, 13-19, 22-24, 26-32, and 34-40 and amended claims 12 and 25 to include --contains one or more mutant genes or transgenes which have been introgressed therein, said mutant genes or transgenes selected from the group consisting of: a plant disease resistance gene, an insect resistance gene, a herbicide resistance gene, and a male sterility gene--, thereby specifying the types of transgenes that may be introduced as suggested by the Examiner. Applicant has also added claim 58 to further describe the line produced in such a manner by traits that do not vary from the deposited line at a 5% significance level when measured in the same environmental conditions. Phenotypic traits, an identifying characteristic, are utilized by those of ordinary skill in the art to compare two lines, and a phenotypic comparison is the method used by the patent office to evaluate the novelty of the deposited line itself. Applicant respectfully submits the claims now come within the purview of the written description requirement and request reconsideration.

In light of the above amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of the rejections to claims 9-19, 22-32, and 34-40 under 35 U.S.C. § 112, first paragraph.

Summary

Applicant acknowledges that claims 1-7 and 20 are allowed.

Conclusion

In conclusion, Applicant submits in light of the above amendments and remarks, the claims as amended are in a condition for allowance, and reconsideration is respectfully requested.

This is a request under the provision of 37 C.F.R. § 1.136(a) to extend the period for filing a response in the above-identified application for two months from May 23, 2003 to July 23, 2003. Applicant is a large entity; therefore, a check is enclosed in the amount of \$410.00 for two months to cover the cost of the extension.

Any deficiency or overpayment should be charged or credited to Deposit Account 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,



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